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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,699	03/06/2009	Karlheinz Rehm	2003P01966WOUS	3534
7590	06/19/2009	Russell W. Warnock BSH Home Appliances Corporation 100 Bosch Boulevard New Bern, NC 28562	EXAMINER	
OSTERHOUT, BENJAMIN LEE		ART UNIT		PAPER NUMBER
1792		MAIL DATE		DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/583,699	REHM ET AL.
	Examiner	Art Unit
	BENJAMIN OSTERHOUT	1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 13-24 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
 5) Claim(s) ____ is/are allowed.
 6) Claim(s) 13-24 is/are rejected.
 7) Claim(s) ____ is/are objected to.
 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 20 June 2006 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20060620</u> . | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the power supply input filter of claim 19 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 13-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Regarding claim 13, a broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 13 recites the broad recitation household appliance, and the claim also recites especially a washing machine or dishwasher which is the narrower statement of the range/limitation.

Claims 14-24 are also rejected for depending upon rejected claim 13.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 13, 15-18, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by WIPO Patent Application Publication WO02/12610 A1 to Park et al. (Park).

Regarding claim 13, Park teaches a washing machine (Fig. 4, generally) which includes an electronic controller for controlling washing in a body (not shown, page 6, II. 20-22) wherein the device includes a circuit board (programmable control module, Fig. 4, part 20) connected for exchange of electrical signal with a controller and a connection port (interface, Fig. 4, part 30) on the circuit board for exchange of data related to washing with an external device (page 6, II. 23-26) wherein Figure 4 clearly shows access to the connection port (interface, Fig. 4, part 30) without dismantling parts of the washing machine.

Regarding claim 15, Park also teaches that the connection port (Fig. 4, part 30) includes a plurality of pins (contacts, Fig. 4, part 33) which is a type of plug connection.

Regarding claim 16, Park teaches an embodiment of the circuit board (programmable control module, Fig. 8, part 20) connected to a radio transceiver (interface, Fig. 8, part 72) which communicates with an external radio transceiver (Fig.

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8, part 71) through the use of UV communication (page 14, II. 10-14) a type of wireless radio connection.

Regarding claim 17, Park teaches that the programmable control module is a circuit board (Fig. 4, part 20) which one of ordinary skill in the art understands to include electronic components and furthermore Park anticipates the possibility of shorting out of electronic components thereby preferring to use a structure that inhibits the flow of water to the electronic components (page 8, II. 25-29). The language in claim 17, "preferably at least one microprocessor and/or memory means" is not a positive recitation; and therefore said language is regarded as optional language which does not require or provide a further structural limitation to the claim language.

Regarding claim 18, Park also anticipated the updating of the program in order to improve washing performance (page 1, II. 19-22) therefore one of ordinary skill in the art would understand that the circuit board (Fig. 4, part 20) which receives information via the connection port (interface, Fig. 4, part 30) further includes a program to determine the wash cycle of the washing machine (See also page 6, II. 20-22).

Regarding claim 22, Park teaches that the circuit board (programmable control module, Fig. 4, part 20) is a part of the controller for controlling washing in a body (not shown, page 6, II. 20-22) and therefore is connected to the washing machine. One of ordinary skill in the art at the time of the invention would understand that since the controller is a type of electronic controller it uses electricity in order to send/receive input and output, therefore the controller clearly has an electrical connection to the washing machine. The language regarding the "the dishwasher" is not a positive recitation of the household appliance being a dishwasher and therefore this language relates back to the

35 USC 112 rejection as above and therefore the dishwasher language is disregarded.

The language in claim 22, “preferably embodied as a group plug with a plurality of electrical contacts” is not a positive recitation; and therefore said language is regarded as optional language which does not require or provide a further structural limitation to the claim language.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 13-14 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 20030205954 to Oyler et al. (Oyler) in view of WIPO Patent Application Publication WO02/12610 A1 to Park et al. (Park).

Regarding claims 13 and 14, Oyler teaches a dishwasher with a control module in the door assembly (paragraph 1, II. 1-3 and paragraph 47, II. 7-9). Oyler does not

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teach that the control module has an interface that can be accessed for programming without dismantling parts of the dishwasher.

Park teaches a washing machine (Fig. 4, generally) which includes an electronic controller for controlling washing in a body (not shown, page 6, II. 20-22) wherein the device includes a circuit board (programmable control module, Fig. 4, part 20) connected for exchange of electrical signal with a controller and a connection port (interface, Fig. 4, part 30) on the circuit board for exchange of data related to washing with an external device (page 6, II. 23-26) wherein Figure 4 clearly shows access to the connection port (interface, Fig. 4, part 30) from an exterior of the washing machine in order to update the washing technology of the washing machine (page 2, II. 2-10 and 18-20) without have to dismantle parts of the washing machine.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the control module of Oyler with the controller and programmable control module of Park in order to update the washing technology of the dishwasher of Oyler without having to dismantle parts of the dishwasher.

Regarding claim 24, Oyler in view of Park is relied upon as above in claim 14. Oyler in view of Park teach the accessible control module in a dishwasher that can be accessed from outside the dishwasher. Oyler in view of Park do not teach that the programmable control module is located in a bottom tray of the dishwasher.

However, the placement of the controller in a bottom tray of a dishwasher is a matter of obvious engineering choice. See MPEP 2144.04 VI, C; *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950). The bottom trays are easily accessible and unobstructed by use of the dishwasher. Furthermore, even if the control module were

placed in the bottom tray of the dishwasher, the movement of the control module would still achieve the predictable result of being able to be accessed from an exterior of the dishwasher in order to be updated. Therefore said movement of the control module would not have modified the operation of the control module.

10. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over WIPO Patent Application Publication WO02/12610 A1 to Park et al. (Park) in view of U.S. Patent No. 5917690 to Anderson.

Regarding claim 19, Park is relied upon as above in claim 13. Park does not teach the use of a power supply input filter on the programmable control module (circuit board) for filtering higher frequencies.

Anderson teaches regulated current power supply (col. 1, ll. 11-12) wherein the power supply uses an input filter to reject internal noise (col. 2, ll. 52-56) wherein such internal noise may interfere with the signals sent among the various electrical components.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the program control module (circuit board) of Park with the power supply input filter of Anderson in order to reject internal noise wherein such internal noise may interfere with the signals sent among the various electrical components of the washing machine.

The language in claim 19, “preferably filter out frequencies in the range of 150 kHz to 30 MHz or from 30 MHz to 300MHz” is not a positive recitation; and therefore

said language is regarded as optional language which does not require or provide a further structural limitation to the claim language.

11. Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over WIPO Patent Application Publication WO02/12610 A1 to Park et al. (Park) in view of U.S. Patent 5915851 to Wattrick et al. (Wattrick).

Regarding claim 20, Park is relied upon as above in claim 13. Park does not teach that the control module includes a primary power plug connector for the power supply of the control module and appliance. At the very least one of ordinary skill in the art would understand the control module of Park to be hardwired in order to receive electricity.

Wattrick teaches a home appliance for water dispensing and draining (col.1, ll. 5-7) wherein the electrical plug connector registers with a compatible plug of the control module (col. 6, ll. 39-40).

Since Park and Wattrick each teach means for connecting the control module and appliance to power it would have been obvious to one of ordinary skill in the art to replace the hard wired means with the plug connector means in order to achieve the predictable result of supplying power to the control module and appliance.

The language regarding the "the dishwasher" is not a positive recitation of the household appliance being a dishwasher and therefore this language relates back to the 35 USC 112 rejection as above and therefore the dishwasher language is disregarded.

Regarding claim 21, the claim language for this claim is intended use. One of ordinary skill in the art could arrange the components or a connector wherein the interface and the power plug connector can be contacted by a complimentary combination plug connector. In this claim, Applicant has not per se limited the structure of the control module, but rather recited a structure of a combination plug connector that Applicant is not positively claiming. Furthermore the language in claim 21, "preferably both a complementarily constructed counterpart to the primary plug connector and also a complementarily constructed counterpart to the interface are combine to form a unit" is not a positive recitation; and therefore said language is regarded as optional language which does not require or provide a further structural limitation to the claim language.

12. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over WIPO Patent Application Publication WO02/12610 A1 to Park et al. (Park) in view of U.S. Patent Application Publication No. 20020131243 to Harrison et al. (Harrison).

Regarding claim 23, Park is relied upon as above in claim 13. Park teaches a washing machine (Fig. 4, generally) which includes a controller for controlling washing in a body (not shown, page 6, ll. 20-22) wherein the device includes a circuit board (programmable control module, Fig. 4, part 20) on which one of ordinary skill in the art understands to include electronic components and furthermore Park anticipates the possibility of shorting out of electronic components thereby preferring to use a structure that inhibits the flow of water to the electronic components (page 8, ll. 25-29). Park does not teach that the washing machine has a complementarily constructed slot to

receive the board, wherein a section at the edge of the board is preferably embodied as an electrical connection with a number of electrical contacts.

Harrison teaches a circuit board with electrical contacts on its edge (Fig. 1, part 11 and part 12) and slot connector assembly (paragraph 1, II. 1-2) wherein a circuit board may be removably inserted into a slot connector for the purposes of mechanically and electrically coupling the circuit board to a motherboard (paragraph 15, II. 1-6).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the controller and programmable control module of Park with the circuit board with electrical contacts and slot connector assembly of Harrison in order to removably, mechanically, and electrically couple the circuit board to the controller.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN OSTERHOUT whose telephone number is (571)270-7379. The examiner can normally be reached on Monday-Thursday 8:30am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph L. Perrin/
Joseph L. Perrin, Ph.D.
Primary Examiner
Art Unit 1792

/BLO/

Benjamin L. Osterhout
12 June 2009